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EXAMINER	
NOGUEROLA, ALEXANDER STEPHAN	
ART UNIT	PAPER NUMBER
1753	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/12/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

## Office Action Summary

Application No.

10/647,389

Applicant(s)

KOJIMA, TAKASHI

Examiner

ALEX NOGUEROLA

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 10-16 is/are allowed.
- 6) ☒ Claim(s) 1 and 7-9 is/are rejected.
- 7) ☒ Claim(s) 2-6 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 August 2003 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☒ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 08/26/2003.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- ☐ Notice of Informal Patent Application
- ☒ Other: See Continuation Sheet.

Continuation of Attachment(s) 6). Other: IDS of 01/06/2004; IDS of 03/31/2006; 01/23/2006.

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1 and 7 are rejected under 35 U.S.C. 102(b) as being anticipated by Bosch (DE 29802115 U1).

Addressing claim 1, Bosch discloses a gas sensor (Figure 4) comprising  
a sensor element (39,40) having a length and electrical terminals (27) formed on  
an end portion thereof (Figures 5 and 4); and

a connector (Figure 3) working to establish electrical connections between the  
electrical terminals of the sensor element and conductors extending from inside to  
outside the gas sensor (figure 4), the connector including terminal connecting members  
(58) and at least two holding members (1,2), the holding members working to retain  
therein the terminal connecting members and the end of the sensor element to make  
the electrical connections between the electrical terminals of the sensor element and  
the conductors (Figures 3 and 5), the terminal connecting members and the holding  
members being so configured geometrically as to establish mechanical engagement  
therebetween (Figures 3 and 5).

Addressing claim 7, Bosch discloses a gas sensor comprising  
a sensor element (39, 40) having a length and electrical terminals (27) formed on  
an end portion thereof (Figures 4 and 5);

at least two holding members (1,2) joined together to define a chamber therein;  
terminal connecting spring members (58) leading to conductors extending from  
inside to outside the gas sensor (Figure 4), the terminal connecting spring members  
being retained within the chamber of the holding members in electrical contact with the  
electrical terminals of the sensor element so as to add elastic pressures to the sensor  
element in a direction perpendicular to the length of the sensor element, respectively, to  
hold the end portion of the sensor element within the chamber of the holding members  
(Figures 4 and 5); and

a clamping spring mechanism (20) disposed on an outer periphery of the holding  
member (Figure 3), the clamping spring mechanism working to add an elastic pressure  
F2 to the holding members to clamp the holding members together (implied by Figure 3,  
which shows the holding members clamped together),

wherein the elastic pressure F1 is lower than or equal to an elastic pressure that  
is a sum of the elastic pressures produced by the terminal connecting spring members

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(implied by Figure 3 because otherwise the clamping spring mechanism could not hold the holding members together so closely).

3. Claims 1, 7, and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by the JPO English language computer translation of Takashi (JP 2001-343356 A) ("Takashi").

Addressing claim 1, Takashi discloses a gas sensor (Drawing 1) comprising a sensor element (15) having a length and electrical terminals (151) formed on an end portion thereof (Drawings 3 and 9); and

a connector (Drawing 6) working to establish electrical connections between the electrical terminals of the sensor element and conductors extending from inside to outside the gas sensor (Drawing 9), the connector including terminal connecting members (21) and at least two holding members (221), the holding members working to retain therein the terminal connecting members and the end of the sensor element to make the electrical connections between the electrical terminals of the sensor element and the conductors (Drawing 9), the terminal connecting members and the holding members being so configured geometrically as to establish mechanical engagement therebetween (Drawings 5 and 9).

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Addressing claim 7, Takashi discloses a gas sensor comprising  
a sensor element (15) having a length and electrical terminals (151) formed on  
an end portion thereof (Drawings 3 and 9);

at least two holding members (221) joined together to define a chamber therein;  
terminal connecting spring members (21) leading to conductors extending from  
inside to outside the gas sensor (Drawing 1), the terminal connecting spring members  
being retained within the chamber of the holding members in electrical contact with the  
electrical terminals of the sensor element so as to add elastic pressures to the sensor  
element in a direction perpendicular to the length of the sensor element, respectively, to  
hold the end portion of the sensor element within the chamber of the holding members  
(Drawings 1, 5, and 6); and

a clamping spring mechanism (23) disposed on an outer periphery of the holding  
member (Drawing 6), the clamping spring mechanism working to add an elastic  
pressure F2 to the holding members to clamp the holding members together (implied by  
Drawings 5 and 6, which shows the holding members clamped together),

wherein the elastic pressure F1 is lower than or equal to an elastic pressure that  
is a sum of the elastic pressures produced by the terminal connecting spring members  
(implied by Drawings 5 and 6 because otherwise the clamping spring mechanism could  
not hold the holding members together so closely).

Addressing claim 9, as may be inferred from Drawings 1 and 2 the terminal spring members (23) have a portion (219) that will have elastic pressure F1 with a vector as claimed. Thus must be balanced by a vector of the elastic pressure F2 to keep the holding members together.

4. Claims 1 and 7 are rejected under 35 U.S.C. 102(b) as being anticipated by the Weyl et al. (US 6,878,252 B2) (Weyl I).

Addressing claim 1, Weyl I discloses a gas sensor (abstract) comprising  
a sensor element (21) having a length and electrical terminals (22) formed on an end portion thereof (Figures 1-3 ); and

a connector (20) working to establish electrical connections between the electrical terminals of the sensor element and conductors extending from inside to outside the gas sensor (Figure 1), the connector including terminal connecting members (23) and at least two holding members (24a, 24b), the holding members working to retain therein the terminal connecting members and the end of the sensor element to make the electrical connections between the electrical terminals of the sensor element and the conductors (Figures 1-3), the terminal connecting members and the holding members being so configured geometrically as to establish mechanical engagement therebetween (Figures 1-3).



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Addressing claim 7, Weyl discloses a gas sensor comprising  
a sensor element (21) having a length and electrical terminals (22) formed on an  
end portion thereof (Figures 1-3);

at least two holding members (24a, 24b) joined together to define a chamber  
therein;

terminal connecting spring members (23) leading to conductors extending from  
inside to outside the gas sensor (Figure 1), the terminal connecting spring members  
being retained within the chamber of the holding members in electrical contact with the  
electrical terminals of the sensor element so as to add elastic pressures to the sensor  
element in a direction perpendicular to the length of the sensor element, respectively, to  
hold the end portion of the sensor element within the chamber of the holding members  
(Figure 1); and

a clamping spring mechanism ((25), col. 02:38) disposed on an outer periphery  
of the holding member (Figures 1-3), the clamping spring mechanism working to add an  
elastic pressure F2 to the holding members to clamp the holding members together  
(implied by Figures 1-3, which shows the holding members clamped together),

wherein the elastic pressure F1 is lower than or equal to an elastic pressure that  
is a sum of the elastic pressures produced by the terminal connecting spring members  
(implied by Figures 1-3 because otherwise the clamping spring mechanism could not  
hold the holding members together so closely).

5. Claims 1, 7, and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by the Weyl et al. (US 5,246,562) (Weyl II).

Addressing claim 1, Weyl II discloses a gas sensor (abstract) comprising  
a sensor element (21) having a length and electrical terminals (36) formed on an end portion thereof (Figures 6 and 7); and

a connector (43) working to establish electrical connections between the electrical terminals of the sensor element and conductors extending from inside to outside the gas sensor (Figures 1 and 7), the connector including terminal connecting members (46) and at least two holding members (44', 45'), the holding members working to retain therein the terminal connecting members and the end of the sensor element to make the electrical connections between the electrical terminals of the sensor element and the conductors (Figures 3, 7, and 9), the terminal connecting members and the holding members being so configured geometrically as to establish mechanical engagement therebetween (Figures 3, 7, and 9).

Addressing claim 7, Weyl II discloses a gas sensor comprising  
a sensor element (21) having a length and electrical terminals (36) formed on an end portion thereof (Figures 6 and 7);

at least two holding members (44', 45') joined together to define a chamber therein;

terminal connecting spring members (46) leading to conductors extending from inside to outside the gas sensor (Figure 1), the terminal connecting spring members being retained within the chamber of the holding members in electrical contact with the electrical terminals of the sensor element so as to add elastic pressures to the sensor element in a direction perpendicular to the length of the sensor element, respectively, to hold the end portion of the sensor element within the chamber of the holding members (Figure 1); and

a clamping spring mechanism ((47), col. 04:42) disposed on an outer periphery of the holding member (Figures 1 and 3), the clamping spring mechanism working to add an elastic pressure F2 to the holding members to clamp the holding members together (implied by Figures 1 and 3, which shows the holding members clamped together),

wherein the elastic pressure F1 is lower than or equal to an elastic pressure that is a sum of the elastic pressures produced by the terminal connecting spring members (implied by Figures 1 and 3 because otherwise the clamping spring mechanism could not hold the holding members together so closely).

Addressing claim 9, as may be inferred from Figures 1 and 7 the terminal spring members (46) have a portion (58) that will have elastic pressure F1 with a vector as claimed, especially if the spring members expand due to heating. Thus must be balanced by a vector of the elastic pressure F2 to keep the holding members together.

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6. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by the JPO English language translation of JP2002-168824 A (Yasushi et al.) ("Yasushi").

Yashushi discloses a gas sensor ([0001] of the Detailed Description) comprising a sensor element (4) having a length and electrical terminals (30,31,32) formed on an end portion thereof (Drawings 1 and 2); and

a connector (Drawing 3(d)) working to establish electrical connections between the electrical terminals of the sensor element and conductors extending from inside to outside the gas sensor (Drawing 1 and 3(d)), the connector including terminal connecting members (10) and at least two holding members (132), the holding members working to retain therein the terminal connecting members and the end of the sensor element to make the electrical connections between the electrical terminals of the sensor element and the conductors (Drawings 1 and 3(d)), the terminal connecting members and the holding members being so configured geometrically as to establish mechanical engagement therebetween (Drawings 1 and 3(d)).

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

9. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bosch (DE 29802115 U1).

Bosch discloses a gas sensor comprising

a sensor element (39, 40) having a length and electrical terminals (27) formed on an end portion thereof (Figures 4 and 5);

at least two holding members (1,2) joined together to define a chamber therein;

terminal connecting spring members (58) leading to conductors extending from inside to outside the gas sensor (Figure 4), the terminal connecting spring members being retained within the chamber of the holding members in electrical contact with the

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electrical terminals of the sensor element so as to add elastic pressures to the sensor element in a direction perpendicular to the length of the sensor element, respectively, to hold the end portion of the sensor element within the chamber of the holding members (Figures 4 and 5); and

a clamping spring mechanism (20) disposed on an outer periphery of the holding member (Figure 3), the clamping spring mechanism working to add an elastic pressure  $F_2$  to the holding members to clamp the holding members together (implied by Figure 3, which shows the holding members clamped together),

wherein the elastic pressure  $F_1$  is lower than or equal to an elastic pressure that is a sum of the elastic pressures produced by the terminal connecting spring members (implied by Figure 3 because otherwise the clamping spring mechanism could not hold the holding members together so closely).

Bosch only provides one clamping spring mechanism; however, barring evidence to the contrary, such as unexpected results, whether one or more than one clamping mechanism is used will just depend on the desired clamping strength.

10. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Weyl et al. (US 6,878,252 B2) (Weyl I).

Weyl discloses a gas sensor comprising  
a sensor element (21) having a length and electrical terminals (22) formed on an end portion thereof (Figures 1-3);

at least two holding members (24a, 24b) joined together to define a chamber therein;

terminal connecting spring members (23) leading to conductors extending from inside to outside the gas sensor (Figure 1), the terminal connecting spring members being retained within the chamber of the holding members in electrical contact with the electrical terminals of the sensor element so as to add elastic pressures to the sensor element in a direction perpendicular to the length of the sensor element, respectively, to hold the end portion of the sensor element within the chamber of the holding members (Figure 1); and

a clamping spring mechanism ((25), col. 02:38) disposed on an outer periphery of the holding member (Figures 1-3), the clamping spring mechanism working to add an elastic pressure F2 to the holding members to clamp the holding members together (implied by Figures 1-3, which shows the holding members clamped together),

wherein the elastic pressure F1 is lower than or equal to an elastic pressure that is a sum of the elastic pressures produced by the terminal connecting spring members (implied by Figures 1-3 because otherwise the clamping spring mechanism could not hold the holding members together so closely).

Weyl only provides one clamping spring mechanism; however, barring evidence to the contrary, such as unexpected results, whether one or more than one clamping mechanism is used will just depend on the desired clamping strength. As seen in Figure 1 at least one other additional clamping spring mechanism (25) could easily be provided on the periphery of the holding members and so is duplication of parts for multiplied effect.

11. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Weyl et al. (US 5,246,562) ("Weyl II").

Weyl II discloses a gas sensor comprising

a sensor element (21) having a length and electrical terminals (36) formed on an end portion thereof (Figures 6 and 7);

at least two holding members (44', 45') joined together to define a chamber therein;

terminal connecting spring members (46) leading to conductors extending from inside to outside the gas sensor (Figure 1), the terminal connecting spring members being retained within the chamber of the holding members in electrical contact with the electrical terminals of the sensor element so as to add elastic pressures to the sensor



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element in a direction perpendicular to the length of the sensor element, respectively, to hold the end portion of the sensor element within the chamber of the holding members (Figure 1); and

a clamping spring mechanism ((47), col. 04:42) disposed on an outer periphery of the holding member (Figures 1 and 3), the clamping spring mechanism working to add an elastic pressure  $F_2$  to the holding members to clamp the holding members together (implied by Figures 1 and 3, which shows the holding members clamped together),

wherein the elastic pressure  $F_1$  is lower than or equal to an elastic pressure that is a sum of the elastic pressures produced by the terminal connecting spring members (implied by Figures 1 and 3 because otherwise the clamping spring mechanism could not hold the holding members together so closely).

Weyl II only provides one clamping spring mechanism; however, barring evidence to the contrary, such as unexpected results, whether one or more than one clamping mechanism is used will just depend on the desired clamping strength. As seen in Figure 1 at least one other additional clamping spring mechanism (47) could easily be provided on the periphery of the holding members and so is duplication of parts for multiplied effect.

***Claim Objections***

12. Claim 7 is objected to because of the following informality: in line 15 "holing should be -- holding --. Appropriate correction is required.

***Allowable Subject Matter***

13. Claims 2-6 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

14. Claims 10-16 are allowed.

15. The following is a statement of reasons for the indication of allowable subject matter:

a) Claim 2: in the Japanese Office action (Examination) for application 2002-254065 mailed on January 31, 2006 ("Japanese Office action") Claim 1 was rejected over the combination of JP-A-2001-343356, JP-A-2002-168824, and Utility Model

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Application No. 59-156162. I instead rejected claim 1, above, separately under 35 U.S.C. 102(b) with JP-A-2001-343356 and JP-A-2002-168824, without using Utility Model Application No. 59-156162. Note that from the rejection of claim 1 in the Japanese Office action it appears that in application 2002-254066 claim 1 requires the projections and recesses as provided in claim 2 of the instant application because the rejection of claim 1 in the Japanese Office action uses Utility Model Application No. 59-156162 to provide protrusions and recesses as claimed. Claim 2 requires for the gas sensor as set forth in claim 1 that "... each of the terminal connecting members has a protrusion, and each of the holding members has formed therein recesses within which the protrusions of the terminal connecting members are fitted to establish the mechanical engagement between the terminal connecting members and the holding members." In the Japanese Office action it is alleged that because it was known in the art to provide protrusions on terminal connections and fixing recesses, as taught by Model Application No. 59-156162, that it would have obvious to use them. In other words because the protrusions and recesses are themselves old in the art they are *pre* se obvious to use. This is not a patentability standard that the US PTO adheres to. Moreover, it is clear from a view of the connector in Model Application No. 59-156162 (Drawing 6) that the protrusions and recesses therein are not compatible with the connector configuration of JP-A-2001-343356 (Drawing 9) and JP-A-2002-168824 (Drawing 3(e)). JP-A-2002-168824 uses bends (14) at the front end of the terminal connecting members to secure them against the holding members (132). Similarly in JP-A-2001-343356 a bend (22) at the front end of each terminal connecting member

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(21) is used to secure them against the holding members (221). See Drawings 2 and 7 in JP-A-2001-343356.

In the Japanese Office action (Examination) for application 2002-254066 mailed on November 22, 2005 ("Japanese Office action II") Claims 1 and 2 are rejected over JP-A-2001-343356. I have used JP-A-2001-343356 to reject claim 1, but for the reasons set forth in the immediately preceding paragraph have not used JP-A-2001-343356 against claim 2.

b) Claims 3, 4, and 6 depend from allowable claim 2.

c) Claim 5 differs from claim 2 only in that claim 5 requires the terminal connecting members to each have a plurality of protrusions, while claim 2 only requires each terminal connecting member to have a single protrusion. So, claim 5 is allowable for at least the same reasons as claim 2 is.

d) WO 0134951 A is cited as an "X" reference against claim 7 in the European Search report for application Number EP 03019485. Claim 7 requires a clamping spring member disposed on an outer periphery of the holding members. Element 60 appears to be construed as the claimed clamping spring (Figure 2). However, it is not a spring, but an inelastic solid body, which may be made of ceramic or alumina, and does not function as a clamp, but as a terminal support. See page 6, lines 14-21; page 10, lines

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10-16; and Figures 2, 4, and 5. Also, it is only disposed on the outer periphery of holding member 90, not also on holding member 92.

e) Claim 10: the combination of limitations requires the terminal connecting spring members to have a bent portion connecting between the supporting portion and the elastic portion and "... the bent portion ... directing the elastic contact portion toward the supporting portion so as to produce elasticity which allows the elastic contact portion to be deformed toward the supporting portion; and at least two clamping members working to clamp the end portion of said gas sensor through said terminal connecting spring members so as to establish elastic contact of each of said terminal connecting spring members with one of the electrical terminals of said sensor element."

In Yasushi the terminal connecting spring members (10) each have a bent portion that is substantially U-shaped (14) and an elastic contact portion (16); however, the bent portion is not between the supporting portion (12) and the elastic contact portion (16), but is at the end of the elastic contact portion. Also, the bent portion does not direct the elastic contact portion toward the supporting portion so as to establish elastic contact of each of said terminal connecting spring members with one of the electrical terminals (30-35) of said sensor element. The bent portion is hooked onto a projection at the bottom edge of the housing frame so that the terminal spring member is held in place. So, contact of each terminal connecting spring member with one of the electrical terminals is inelastic. See Drawing 3(e).

WO 0134951 A is cited as an "X" reference against claim 10 in the European Search report for application Number EP 03019485. Element 60 appears to be construed as the claimed clamping spring (Figure 2). Only one such element is disclosed in WO 0134951 A; claim 10 requires at least two clamping elements. Moreover, element 60 does not function as a clamp, but as a terminal support. "The terminal support 60 isolates the terminals 62, 63 from each other and holds the terminals 62, 63 in position at the top of the sensing element 80." See page 6, lines 14-21; page 10, lines 10-16; and Figures 2, 4, and 5.

f) Claims 11-16 depend directly or indirectly from allowable claim 10.

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to ALEX NOGUEROLA whose telephone number is (571) 272-1343. The examiner can normally be reached on M-F 8:30 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, NAM NGUYEN can be reached on (571) 272-1342. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Alex Noguerola  
Primary Examiner  
AU 1753  
March 6, 2007